## **SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

## **Annual Report on AB 2588 Air Toxics "Hot Spots" Program**

## **April 2006**

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#### INTRODUCTION

This report satisfies Section 44363 of the California Health and Safety Code which requires the South Coast Air Quality Management District (AQMD) to annually prepare and publish a status and forecast report of the Air Toxics "Hot Spots" Information and Assessment Act (or AB 2588) activities. The main body of the report presents AB 2588 activities that occurred in calendar year 2005 and describes plans for future activities [Section 44363(a)(1)]. Appendix A lists facilities which have prepared health risk assessments for the AB 2588 program and their corresponding risks [Section 44363(a) (2) and (3)]. Appendix B describes the status of control measures and rules to reduce emissions of toxic air contaminants [Section 44363(a) (4)].

#### **Background**

In 1987, the California legislature adopted the Air Toxics "Hot Spots" Information and Assessment Act (or AB 2588). AB 2588 requires facilities to submit an air toxics inventory report (ATIR). A facility's priority score is calculated from information in the ATIR.

AQMD staff follows the procedures in Health and Safety Code Section 44360 for prioritization and categorization of facilities. The potency, toxicity and amount of toxics released into the air, as well as the distance to workers, residents and sensitive receptors (such as hospitals, schools, and day care centers) are considered for prioritization and categorization. Facilities are assigned to high, medium, and low priority categories.

A facility with a priority score greater than ten (10) must provide a health risk assessment (HRA), following guidelines established by the State of California Office of Environmental Health Hazard Assessment (OEHHA), and supplemented by AQMD guidelines (described on page 8 of this report). If the risk reported in the HRA exceeds specific thresholds, then the facility is required to provide public notice to the affected community. The program is illustrated in Figure 1.

In 1992, the California legislature added a risk reduction component, the Facility Air Toxic Contaminant Risk Audit and Reduction Plan (or SB 1731), which required the District to specify a significant risk level, above which risk reduction would be required. In Rule 1402, the District Board set this significant risk level at a cancer risk of 100 in a million, and a total chronic or acute hazard index of 5.0. The Board also established its own action risk levels at a cancer burden of 0.5, a cancer risk of 25 in a million, and a hazard index of 3.0. Public notification and a public meeting are required for facilities with cancer risks greater than ten in a million or non-cancer acute or chronic hazard index greater than or equal to one. Rule 1402 requires annual public notice until the facility gets below the rule's action risk levels.

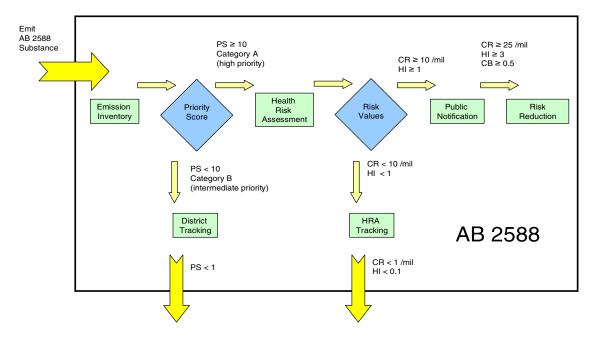


Figure 1 - Schematic of the Hot Spots Program.

(CR = cancer risk; PS = priority score; HI = hazard index; CB = cancer burden)

Currently, SCAQMD staff uses the Annual Emissions Reporting (AER) software and forms to obtain a preliminary toxic inventory used for facility prioritization. Facilities with priority scores greater than ten are then asked to submit a detailed ATIR and perform an HRA using ARB's Hotspots Analysis and Reporting Program (HARP).<sup>[1]</sup>

#### Universe

AQMD has nearly 800 facilities active in the program, more than any other air district in the state. A facility is considered active in the AB 2588 program if it is subject to Hot Spot fees and is required to update its toxic inventory once every four years. This includes facilities that have:

- cancer risks greater than one in a million; or
- non-cancer hazard index greater than 0.1; or
- priority score greater than 1.

Air districts were also permitted to identify industry-wide categories. The facilities that qualify for these categories share the same Standard Industrial Classification (SIC) code, by majority are small businesses, would suffer severe economic hardships by individual compliance, and can be easily and generically characterized. To date, the AQMD has identified seven industry-wide categories:

- Retail Gasoline Dispensing;
- Perchloroethylene Dry Cleaning;
- Auto Body Shops;
- Fiberglass Molding;
- Printing;
- Metal Plating; and
- Wood Stripping / Refinishing.

The advantage to an industry-wide category is that compliance may be handled collectively. The California Air Pollution Control Officers Association's (CAPCOA) Toxics Committee has been tasked with developing statewide emission inventory and risk assessment guidelines for several of these Industry-wide categories. Specifically, such guidelines have been completed for auto body shops<sup>[2]</sup> and gasoline service stations.<sup>[3]</sup> Guidelines for perchloroethylene dry cleaners<sup>[4]</sup> are being finalized. The guidelines provide a cost-effective and uniform method for calculating facility emissions and estimating toxic risks for the approximately 1,400 auto body shops, 3,500 gasoline service stations and 1,700 perchloroethylene dry cleaners under the AQMD's jurisdiction. In this manner, the AQMD may prepare industry-wide inventories, risk assessments, and public notices and risk reduction plans if necessary.

#### **ACTIVITIES AND ACCOMPLISHMENTS**

In calendar year 2005, the AB 2588 program staff accomplished the following:

- Approved air toxic inventory reports (ATIRs) for 17 facilities;
- Requested updated health risk assessments (HRAs) for nine facilities;
- Finalized the HRAs for two facilities of concern to the community (i.e., Venoco Inc. and Quemetco);
- Provided criteria and toxic emissions on the web and developed other website enhancements:
- Updated the risk assessment procedures for Rules 1401 and 212; and
- Maintained a back-log free HRA evaluation.

Each of these efforts is further explained below.

#### ATIRs, HRAs, and Risk Reduction

To date, staff has reviewed and approved nearly 300 facility HRAs and has successfully eliminated the HRA backlog that was a problem a few years ago. The results are summarized in Figures 2 and 3. Appendix A provides the cancer and non-cancer risk levels for each of the facilities that prepared an HRA. About 97 percent of the facilities now have cancer risks below ten in a million and over 98 percent of the facilities have acute and chronic non-cancer hazard indices less than 1.

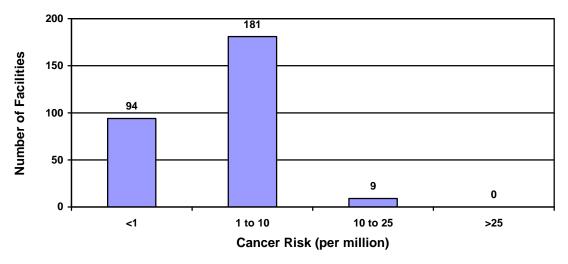


Figure 2 - Summary of facility cancer risks

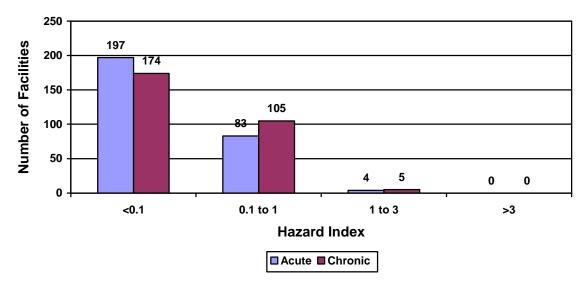


Figure 3 - Summary of facility non-cancer risks

Since the amendment of Rule 1402 on March 17, 2000, which lowered the action risk levels, the AB 2588 staff identified 20 facilities that were required to reduce risks (see Table 1). Nineteen of the facilities have submitted risk reduction plans (RRPs), which were subsequently implemented. Quemetco's RRP is due in April 2006.

A recent analysis of the risk reduction portion of the program showed that facilities reduced risks below the action levels well in advance of the three-year limit in Rule 1402. Facilities took, on average, 11 months to implement their respective risk reduction plans. The rule requires facilities to reduce their risks below the action risk levels as quickly as feasible, but no longer than three years.

**Table 1 - Status of Risk Reduction Plans** 

Fac. ID	Facility Name	Submitted?	Approved?	Implemented?	Residual Risk
7427	Owens-Brockway Glass	Yes	Yes	Yes	Acute HI: 0.01
7730	E.R. Carpenter	Yes	Yes	Yes	Chronic HI: 1.34
8015	Anadite Inc.	Yes	Yes	Yes	Cancer: 3.5
8547	Quemetco	(a)			
8570	Embee Inc.	Yes	Yes	Yes	Cancer: 6.6
14191	Nicklor Chemical Co.	Yes	Yes	Yes	Noncancer HIs: 0 (b)
15504	Schlosser Forge Co.	Yes	Yes	Yes	Cancer: 9.5 Chronic HI: 1.11
18294	Northrop-Grumman	Yes	Yes	Yes	Cancer: 7.6
22410	Palace Plating	Yes	Yes	Yes	Cancer: 5.6 Acute HI: 0.73 Chronic HI: 0.38
25012	Amada Manufacturing America, Inc.	Yes	Yes	Yes	Cancer: <0.1
41229	Lubeco, Inc.	Yes	Yes	Yes	Cancer: 14.0
45938	E.M.E. Inc.	Yes	Yes	Yes	Cancer: <0.1
48323	Sigma Plating Co.	Yes	Yes	Yes	Cancer: 13.8
61160	GE Engine Services	Yes	Yes	Yes	Acute HI: 0.7
116459	GE Engine Services	Yes	Yes	Yes	Cancer <10 (c)
119127	PRC DeSoto International	Yes	Yes	Yes	Cancer: <0.1
126501	Vought Aircraft Industries, Inc.	Yes	Yes	Yes	Cancer: 19.7
134931	Alcoa Global Fasteners, Inc.	Yes	Yes	Yes	Cancer: 0.61
800063	Grover Products Co.	Yes	Yes	Yes	Cancer: 3.3
800196	American Airlines, Inc.	Yes	Yes	Yes	Proj. Cancer: 5.4 Proj. Acute HI: 0.86 (c)

<sup>(</sup>a) Revised HRA approved October 2005; cancer burden is above the action risk level of 0.5. Quemetco's Risk Reduction Plan is due April 2006.

## **Public Outreach and Response to Community Concerns**

AB 2588 staff has been extensively involved in the investigation of community concerns regarding two facilities in the South Coast Air Basin (Basin): Venoco Inc. and Quemetco.

Venoco is an oil and gas production facility located at 9865 Olympic Boulevard, Beverly Hills, California, which is adjacent to Beverly Hills High School. The facility has been

<sup>(</sup>b) Facility left the South Coast Air Basin as a result of a consent decree with the City of Carson. Thus, risks are zero.

<sup>(</sup>c) Pending finalization of residual risk analysis.

operating at that location, under various owners, since the 1970's and oil and gas activities have been going on in the area since the high school was opened in 1928. Parents of students and alumni of Beverly Hills High School became concerned about the high frequency of cancer occurrence among its graduates. AQMD staff required that Venoco prepare an HRA in accordance with Rule 1402(d). Two drafts were provided and reviewed and an outside consultant was hired to participate in the review. The HRA was approved on September 26, 2005. The maximum individual cancer risk is estimated to be 1.2 in a million (primarily from benzene emissions) at a receptor located southeast of the facility. The maximum non-cancer acute hazard index is 0.05 for the respiratory system (primarily from acrolein emissions) at the Beverly Hills High School baseball field north of the facility. The maximum non-cancer chronic hazard index is insignificant (i.e., <0.01). Since its cancer risk is greater than one in a million, Venoco remains in the AB 2588 program and must provide an updated toxic inventory every four years. The next update is due fiscal year 2005-06.

Quemetco is a secondary lead smelter located at 720 S. 7<sup>th</sup> Avenue, City of Industry, California. Most notably, they recycle lead from spent automobile batteries. The facility has been operating at this location since 1959. Persistent neighborhood odors complaints, past violations of the lead health standard, recent permit actions, and the AB 2588 public notice has drawn much public interest, which has grown into a neighborhood Environmental Justice (EJ) Council. AB 2588 Public Notice for cancer risks of 33.4 in one million was issued in January 2003. The EJ Council has convened six times since the public notice: 05/06/03, 06/05/03, 07/02/03, 09/11/03, 07/07/04, and 3/16/2005. Based on comments from the EJ Council and a third party consultant, the AQMD staff has revised the AB 2588 HRA based on local meteorological data and emissions representative of current operations. The revised HRA was approved October 28, 2005. The facility poses a maximum individual cancer risk of 22.0 in a million (primarily from arsenic and 1,3 butadiene emissions) at a residential receptor located about 1,200 meters northwest of the facility and a cancer burden of 1.16. The maximum non-cancer chronic hazard index is 0.19 for the cardiovascular system (primarily from arsenic and nickel emissions) at an industrial receptor located just north of the eastern corner of the facility boundary. The maximum non-cancer acute hazard index is 0.54 for the reproductive system (from arsenic emissions) at the northern corner of the facility property. The public notification meeting was held February 1, 2006 at the Stimson Learning Center in the City of Hacienda Heights. Since the estimated cancer burden exceeds the action risk level of 0.5 in Rule 1402, Quemetco is subject to the risk reduction requirements of rule. Their risk reduction plan is due April 2006.

### **Emissions on the Web and Other Website Enhancements**

As part of the AQMD's Environmental Justice initiatives, a web-based tool to display emissions data was developed early in 2005. The web-based tool<sup>[5]</sup> displays criteria and toxic emissions from facilities in the AER and AB 2588 programs. A user can select by individual facility (using either facility name or ID), by street name, by city, or by zip

code. In addition to satisfying an Environmental Justice initiative, the tool has streamlined staff's public records act efforts.

In 2005, AB 2588 staff developed a document titled, "Supplemental Guidelines for Preparing Risk Assessments to Comply with the Air Toxics 'Hot Spots' Information and Assessment Act," which is currently available on the AQMD website. [6] This document is a supplement to a document prepared by OEHHA and entitled, "Air Toxics Hot Spots Program Risk Assessment Guidelines" (referred to as the OEHHA Guidelines). [7] Facilities required to submit risk assessments to the AQMD under the Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB2588) must follow the OEHHA Guidelines. While the information provided in the OEHHA Guidelines is complete, there are several areas in which the user is referred to their local air districts for specific or additional requirements. The supplemental guidance addresses those and other issues that have arisen during the implementation of the AB2588 Program. For example, the supplemental guidance:

- Provides maximum receptor distances along the facility property boundary and in the impacted area;
- Directs modelers and risk assessors to the proper meteorological data; and
- Identifies required HARP control options for dispersion modeling and risk assessment.

#### **Rule Development Support**

Rule 1401 was adopted in June 1990. The rule establishes permitting requirements for new, relocated, and modified sources that emit one or more of the identified toxic air contaminants (TACs). The rule has been amended numerous times since, primarily to incorporate new TACs or modified health values resulting from OEHHA actions. In August 2003, OEHHA published revised "Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessment." This was followed by ARB's "Recommended Interim Risk Management Policy for Inhalation-Based Residential Cancer Risk in October 2003." ARB also published the Hotspots Analysis and Reporting Program (HARP) on their website on December 31, 2003. These three actions necessitated the modification of AQMD's "Risk Assessment Procedures for Rule 1401 and 212." The Risk Assessment Procedures are used by AQMD's permitting staff and the regulated community to estimate the toxic risk from new, relocated, and modified permitted sources. The modified procedures were implemented on July 1, 2005 and are available on the AQMD's website. [9]

## **Miscellaneous Support Efforts**

AB 2588 staff provided support to several other related toxic activities in 2005 as follows:

- Developed a website to provide assistance and guidance for facilities preparing Rule 1470 Compliance Status Reports and Compliance Plans for diesel-fueled internal combustion engines;
- Reviewed modeling and risk assessment protocols for the Port of Los Angeles, Port of Long Beach, and the Long Beach Airport; and
- Provided dispersion modeling expertise to the development of the document titled, "Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning."<sup>[10]</sup>

The 2<sup>nd</sup> and 3<sup>rd</sup> items were not funded by, or specifically part of, the AB2588 program.

#### **FUTURE ACTIVITIES**

Over the next year, the AB 2588 staff plans to perform the following tasks.

#### **Update Risk Prioritization Procedures and Prioritize of Phases 1A and 1B Facilities**

AB2588 staff must update the AQMD's risk prioritization procedures to be consistent with OEHHA's guidelines<sup>[7]</sup> and with the Risk Assessment Procedures for Rules 1401 and 212.<sup>[9]</sup> After that is accomplished, Phase 1A and Phase 1B facilities can be prioritized based on the latest quadrennial inventory update. Over 400 facilities must be prioritized.

A facility with priority score (PS) greater than ten is considered a "high priority" or "high category" facility and must prepare a HRA; a facility with a PS between one and ten is an "intermediate priority" or "intermediate category" facility and is required to update its toxic emissions once every four years; and a facility with a PS less than one is a "low priority" or "low category" facility and is exempt from the AB 2588 Program.

## **HRA Review and Approval**

Currently, 26 facilities must submit HRAs in the first half of 2006. An important task for the coming year is to review and approve these HRAs.

#### **Website Enhancements**

The Environmental Justice Work Plan for 2005-06 proposes additional enhancements to the AB 2588 website. Staff will provide health risk information for the most common air toxics and links to other websites for related information.

#### **Develop Diesel Work Plan**

In 2006, the AB 2588 staff will be developing a work plan to incorporate diesel particulate matter (DPM) into Rules 1401 and 1402. Data collected per the requirements of Rule 1470 (Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines) indicate that hundreds of facilities have multiple emergency diesel internal combustion engines (ICEs). Many of these facilities with multiple ICEs are expected to have cancer risks greater than the AQMD's public notification threshold of 10 in one million. Some sort of public notification will be

necessary for these facilities. Further, over 100 facilities have more than four ICEs with cancer risks potentially exceeding 25 in a million, which is the action risk level in Rule 1402. Rule development may be necessary to address facility-wide risks from these facilities.

#### Seek Governing Board Approval of Industry-wide Public Notification Procedures

AB 2588 staff is proposing to develop a risk assessment and public notification process for the following industry-wide categories:

- Retail gasoline stations;
- Perchloroethylene (perc) dry cleaners; and
- Diesel internal combustion engines.

Staff has conducted preliminary meetings with the stakeholders regarding the procedures. In 2006, we will have additional outreach before submitting the procedures to the Governing Board for their consideration.

As discussed above, there are many facilities with multiple emergency diesel ICEs whose cancer risks could exceed ten in a million. Staff is also proposing to develop public notification procedures for these facilities.

#### **REFERENCES**

- [1] ARB. 2005. Hotspots Analysis and Reporting Program (HARP). Link to HARP is <a href="http://www.arb.ca.gov/toxics/harp/harp.htm">http://www.arb.ca.gov/toxics/harp/harp.htm</a>.
- [2] CAPCOA. 1996. Auto Bodyshop Industrywide Risk Assessment Guidelines. Prepared by CAPCOA, September 1996. The document is located at the following link: <a href="http://www.arb.ca.gov/ab2588/riskassess.htm">http://www.arb.ca.gov/ab2588/riskassess.htm</a>.
- [3] CAPCOA. 1997. Gasoline Service Station Industrywide Risk Assessment Guidelines. Prepared by CAPCOA, December 1997. The document is located at the following link: http://www.arb.ca.gov/ab2588/riskassess.htm.
- [4] CAPCOA. 2003. Perchloroethylene Dry Cleaner Industrywide Risk Assessment Guidelines. Prepared by CAPCOA, January 13, 2003 (Draft). The document is located at the following link: <a href="http://www.arb.ca.gov/ab2588/riskassess.htm">http://www.arb.ca.gov/ab2588/riskassess.htm</a>.
- [5] The web-based tool is available at: <a href="http://www.aqmd.gov/aer/DataInquiry.html">http://www.aqmd.gov/aer/DataInquiry.html</a>.
- [6] AQMD. 2005. Supplemental Guidelines for Preparing Risk Assessments to Comply with the Air Toxics 'Hot Spots' Informations and Assessment Act. The document is available at <a href="http://www.aqmd.gov/prdas/AB2588/AB2588\_B3.html">http://www.aqmd.gov/prdas/AB2588/AB2588\_B3.html</a> under the bullet item labeled "AQMD risk assessment guidelines."
- [7] OEHHA. 2003. The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. The document is available at <a href="http://www.oehha.org/air/hot\_spots/HRAguidefinal.html">http://www.oehha.org/air/hot\_spots/HRAguidefinal.html</a>.

- [8] ARB. 2003. ARB Recommended Interim Risk Management Policy for Inhalation-Based Residential Cancer Risk. See <a href="http://www.arb.ca.gov/ab2588/riskassess.htm">http://www.arb.ca.gov/ab2588/riskassess.htm</a>.
- [9] AQMD. 2005. Risk Assessment Procedures for Rules 1401 and 212 (Version 7.0). See <a href="http://www.aqmd.gov/prdas/Risk%20Assessment/RiskAssessment.html">http://www.aqmd.gov/prdas/Risk%20Assessment/RiskAssessment.html</a>.
- [10] AQMD. 2005. Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. See <a href="http://www.aqmd.gov/prdas/aqguide/aqguide.html">http://www.aqmd.gov/prdas/aqguide/aqguide.html</a>.

Appendix A
Health Risks from Facilities with an Approved<sup>(a)</sup> HRA

Facility ID	Facility Name	City	Cancer Risk in a million	Acute Hazard Index	Chronic Hazard Index
8547	QUEMETCO INC.	Industry	22.0	0.54	0.19
122822	CONSOLIDATED FILM INDUSTRIES	Hollywood	21.0	0.11	0.40
126501	VOUGHT AIRCRAFT INDUSTRIES	Hawthorne	19.7	0.64	0.24
114927	ANVIL CASES / A CALZONE COMPANY	Industry	19.0	0.13	0.08
11142	KEYSOR-CENTURY CORP	Saugus	17.0	0.54	0.06
41229	LUBECO, INC.	Long Beach	14.02	0.00	0.12
35302	OWENS CORNING FIBERGLASS CORP	Compton	14.0	0.07	0.10
48323	SIGMA PLATING COMPANY	La Puente	13.84	0.01	0.74
18648	CROWN CITY PLATING COMPANY	El Monte	11.99	0.39	0.13
116459	GE ENGINE SERVICES	Los Angeles	<10 <sup>(b)</sup>	0.19	0.25
106797	SAINT-GOBAIN CONTAINERS LLC	Los Angeles	9.85	0.00	0.07
101380	GENERAL DYNAMICS OTS (DOWNEY) INC	Downey	9.80	0.01	0.05
6643	TECHNICOLOR, INC	N. Hollywood	9.78	0.54	0.05
4451	CHERRY TEXTRON	Santa Ana	9.70	0.07	0.15
800183	PARAMOUNT PETROLEUM CORPORATION	Paramount	9.61	0.02	0.01
800318	GRISWOLD INDUSTRIES	Costa Mesa	9.51	0.10	0.01
15504	SCHLOSSER FORGE CO.	Rancho Cucamonga	9.50	1.59	1.11
800149	US BORAX & CHEM CORP	Wilmington	9.46	0.00	0.03
42922	CMC PRINTED BAG INC	Whittier	9.00	< 0.01	< 0.01
800396	BP WEST COAST PRODUCTS, ARCO VINVALE	South Gate	9.00	< 0.01	0.03
3525	P.B. FASTENERS	Gardena	8.91	0.09	0.06
800089	EXXON-MOBIL OIL CORPORATION	Torrance	8.90	0.06	0.05
40829	HAWKER PACIFIC INC	Sun Valley	8.85	0.01	0.43
800259	THE BOEING COMPANY	Canoga Park	8.70	< 0.01	< 0.01
44454	STRUCTURAL COMPOSITES INDUSTRIES, INC.	Pomona	8.60	0.01	0.23
800363	CONOCO-PHILLIPS CO.	Wilmington	8.60	0.98	0.07
2680	LA CO., SANITATION DISTRICT	Whittier	8.57	0.00	0.03
15736	HENRY CO	Hunt. Park	8.50	0.00	0.00
800057	GATX TANK STORAGE TERMINAL CORP	Carson	8.50	0.01	0.06
800236	LA CO., SANITATION DIST UNIT NO.01	Carson	8.41	0.04	0.36
800079	PETRO DIAMOND TERMINAL CO	Long Beach	8.30	0.00	0.16
125281	MODERN PLATING ALCO CAD-NICKEL PLATING	Los Angeles	8.20	0.10	0.01
21615	OPTICAL RADIATION CORP	Azusa	8.08	0.17	0.10
29110	OR. CO., SANITATION DIST	Huntington Beach	8.00	0.37	0.58
110924	WESTWAY TERMINAL COMPANY	San Pedro	8.00	0.33	0.51
3609	AL'S PLATING CO INC	Los Angeles	7.81	0.26	0.17
37603	POLYCARBON INC	Valencia	7.80	0.01	0.36
800182	RIVERSIDE CEMENT CO	Riverside	7.80	0.05	0.13
800370	EQUILON ENTERPRISES,LLC	Wilmington	7.80	0.33	0.45
17301	OR CO., SANITATION DIST	Fountain Valley	7.60	0.11	0.20

Appendix A. Continued.

Facility ID	Facility Name	City	Cancer Risk in a million	Acute Hazard Index	Chronic Hazard Index
18294	NORTHROP CORP., AIRCRAFT DIV WEST	El Segundo	7.60	0.13	0.05
113170	SANTA MONICA HOSPITAL MEDICAL CTR UNIT 2	Santa Monica	7.60	0.17	0.01
800214	LA CITY, HYPERION TREATMENT PLANT	Playa del Rey	7.59	0.06	0.01
800032	CHEVRON U.S.A. INC	Montebello	7.46	0.01	0.18
108701	BALL FOSTER GLASS CONTAINER CO.	El Monte	7.30	0.09	0.07
117002	EQUILON ENTERPRISES,LLC	Wilmington	7.30	0.03	0.07
131003	BP WEST COAST PRODUCTS LLC	Carson	7.28	0.30	0.08
49387	UNIV CAL RIVERSIDE	Riverside	7.13	0.00	0.04
57094	G S ROOFING PRODUCTS CO INC	Wilmington	7.00	0.01	0.01
140499	AMERESCO HUNTINGTON BEACH, LLC	Huntington Beach	7.00	< 0.01	< 0.01
55449	BKK CORPORATION, LANDFILL DIVISION GNRL	West Covina	6.90	0.01	0.10
800372	EQUILON ENTERPRISES,LLC	Carson	6.90	0.44	0.07
5723	AEROCHEM INC	Orange	6.70	0.02	0.10
34764	CADDOCK ELECTRONICS, INC.	Riverside	6.70	0.01	0.09
800113	ROHR IND INC	Riverside	6.70	0.37	0.89
8570	EMBEE INC	Santa Ana	6.62	0.21	0.58
1744	KIRKHILL RUBBER CO	Brea	6.50	< 0.01	0.34
141585	RESOLUTION SPECIALTY MATERIALS, LLC	Lynwood	6.50	0.13	1.60
11726	GE ENGINE SERVICES	Ontario	6.46	0.12	0.59
2852	WALT DISNEY CO	Burbank	6.40	0.02	0.02
800066	HITCO	Gardena	6.40	0.34	0.05
1226	HYATT DIE CAST & ENGINEERING CORP	Cypress	6.24	< 0.01	0.12
800067	BOEING SATELLITE SYSTEMS INC	El Segundo	6.22	0.03	0.08
94187	ROHM AND HAAS DELAWARE VALLEY INCORP	La Mirada	6.20	0.54	0.76
45262	LA CO, SANITATION DISTRICT UNIT NO.02,Scholl Canyon Landfill	Glendale	6.17	0.01	0.05
800026	ULTRAMAR INC.	Wilmington	6.08	0.80	0.07
140961	GKN AEROSPACE TRANSPARENCY SYS INC	Garden Grove	6.00	< 0.01	0.49
800022	CALNEV PIPE LINE CO	Bloomington	5.90	0.00	0.07
800198	ULTRAMAR INC	Wilmington	5.90	0.01	0.09
800279	SFPP, L.P.	Orange	5.85	0.00	0.24
8578	ASSOCIATED CONCRETE PROD. INC	Santa Ana	5.80	0.13	0.57
136148	E/M CORP, GREAT LAKES CHEMICAL CORP SUB	N Hollywood	5.80	0.28	0.57
800129	SO PACIFIC PIPELINES INC	Rialto	5.75	< 0.01	0.02
140798	ARROWHEAD BRASS PROD. INC	Los Angeles	5.70	0.26	0.04
800288	UNIV CAL IRVINE UNIT NO 01	Irvine	5.64	0.00	0.07
22410	PALACE PLATING	Los Angeles	5.60	0.73	0.38
38971	RICOH ELECTRONICS INC	Irvine	5.60	0.02	0.39
14146	MAC GREGOR YACHT CORP	Costa Mesa	5.50	0.00	0.10
54424	L & L CUSTOM SHUTTERS	Placentia	5.50	0.15	0.21

Appendix A. Continued.

Facility ID	Facility Name	City	Cancer Risk in a million	Acute Hazard Index	Chronic Hazard Index
800409	TRW INC.	Redondo Beach	5.48	0.45	0.24
800196	AMERICAN AIRLINES, INC.	Los Angeles	5.40	$0.86^{(b)}$	0.08
800171	MOBIL OIL CO	Vernon	5.33	0.07	0.02
134018	INDUSTRIAL CONTAINER SERVICES	Montebello	5.24	0.57	0.23
4477	SOUTHERN CALIFORNIA EDISON COMPANY	Avalon	4.98	0.05	0.20
109198	TORCH OPERATING CO. (STEARNS GAS CO)	Brea	4.97	0.05	0.01
103888	A J INDUSTRIES INC, SARGENT-FLETCHER CO	El Monte	4.90	0.16	0.02
800038	DOUGLAS AIRCRAFT CO	Long Beach	4.80	0.15	0.11
800264	EDGINGTON OIL, CO.	Long Beach	4.78	0.01	0.01
101977	AMERIGAS PROPANE L.P.	Long Beach	4.70	0.59	0.97
3950	CROWN CORK & SEAL COMPANY, INC.	La Mirada	4.60	0.00	0.11
83102	LIGHT METALS	Industry	4.50	0.04	2.70
37336	COMMERCE REFUSE TO ENERGY FACILITY	Commerce	4.40	0.03	0.08
136395	THOMASON MECHANICAL CORP, BENDER MACHINE, INC.	Vernon	4.40	0.99	0.02
800041	DOW U.S.A.	Torrance	4.40	0.09	0.01
93346	COOPER DRUM CO	South El Monte	4.30	0.09	0.16
115240	MARCHEM TECHNOLOGIES, LONZA INC	Long Beach	4.30	0.28	0.01
131249	BP WEST COAST PRODUCTS LLC	Wilmington	4.30	0.08	0.18
800150	US GOVT., AF DEPT, MARCH AFB	Riverside	4.22	0.07	0.04
124506	BOEING ELECTRON DYNAMIC DEVICES	Torrance	4.17	0.46	0.07
6459	HONEYWELL INTERNATIONAL INC.	Vernon	4.13	0.01	0.01
18439	ACE PLATING CO INC	Los Angeles	4.08	0.58	0.19
16660 45489	MC DONNELL DOUGLAS SPACE SYS CO. sub of BOEING CO. GUIDANT CORP	Huntington Beach Temecula	3.80	0.19 1.31	0.03
8820			3.70	< 0.01	<0.01
9114	REULAND ELECTRIC CO. H.BRITTON LEES SOMITEX PRINTS OF CALIFORNIA	Industry Industry	3.70	0.06	<0.01
17325	ACE CLEARWATER ENTERPRISES	Paramount	3.70	0.00	0.00
106838	VALLEY-TODECO, INC	Sylmar	3.70	0.01	0.00
105598	SENIOR FLEXONICS INC	Burbank	3.64	0.20	0.49
7427	OWENS-BROCKWAY GLASS CONTAINER	Vernon	3.60	0.01	0.06
800007	ALLIED SIGNAL INC, El Segundo	El Segundo	3.58	0.02	0.53
126197	ION BEAM APPLICATIONS INC.	Los Angeles	3.56	< 0.01	0.01
127568	ENGINEERED POLYMER SOLUTION	Montebello	3.53	0.05	0.48
100844	MEDALLION CALIFORNIA PROPERTIES CO	Newhall	3.51	0.02	0.20
140811	DUCOMMUN AEROSTRUCTURES INC	Monrovia	3.50	0.01	0.01
8015	ANADITE INC	South Gate	3.48	0.63	0.78
104013	AERA ENERGY LLC	Brea	3.40	0.05	0.00
8961	HUCK INTERNATIONAL INC	Carson	3.30	0.00	0.02
126191	ION BEAM APPLICATIONS INC.	Los Angeles	3.29	< 0.01	0.00
800063	GROVER PROD. CO	Los Angeles	3.29	0.88	0.07

Appendix A. Continued.

Facility ID	Facility Name	City	Cancer Risk in a million	Acute Hazard Index	Chronic Hazard Index
6384	LA CO., RANCHO LOS AMIGOS MEDICAL CENTER	Downey	3.14	0.01	0.06
800362	CONOCO-PHILLIPS CO.	Carson	3.10	0.67	0.26
11435	THE PQ CORP	South Gate	3.00	0.00	0.01
800395	BP WEST COAST PRODUCTS, ARCO CARSON	Carson	3.00	< 0.01	0.02
10005	ELECTRONIC CHROME GRINDING CO, INC.	Santa Fe Springs	2.96	0.24	0.06
18452	UCLA (REGENTS OF UC)	Los Angeles	2.91	0.01	0.11
2613	US GOVT, NAVY DEPT, NAVAL WEAPONS STN	Seal Beach	2.90	0.11	0.00
116868	EQUILON ENTERPRISES,LLC	Rialto	2.88	0.00	0.04
800035	CONTINENTAL AIRLINES INC	Los Angeles	2.83	0.01	0.13
48274	FENDER MUSICAL INST	Corona	2.81	0.03	0.37
550	LA CO., INTERNAL SERVICE DEPT	Los Angeles	2.80	< 0.01	< 0.01
117247	EQUILON ENTERPRISES,LLC	Carson	2.77	0.14	0.00
116869	EQUILON ENTERPRISES,LLC	Wilmington	2.75	0.00	0.01
800030	CHEVRON U.S.A. INC	El Segundo	2.73	0.29	0.13
5887	ANABOLIC INC	Irvine	2.70	0.03	0.00
16642	ANHEUSER-BUSCH INC.(LA BREWERY)	Van Nuys	2.70	0.02	0.13
25440	ROBERTSHAW CONTROLS CO, GRAYSON CONTROLS	Long Beach	2.70	0.00	0.96
27701	CADDOCK ELECTRONICS, INC.	Riverside	2.70	0.02	0.06
46268	CALIFORNIA STEEL INDUSTRIES, INC.	Fontana	2.70	0.16	0.31
115315	RELIANT ENERGY ETIWANDA,LLC	Etiwanda	2.67	0.01	0.17
133987	PLAINS EXPLORATION & PRODUCTION CO. LP	Inglewood	2.65	0.01	0.07
35483	WARNER BROTHERS STUDIO FACILITIES	Burbank	2.60	0.10	0.26
7949	CUSTOM FIBERGLASS MFG CO/CUSTOM HARDTOP	Long Beach	2.50	< 0.01	<0.01
79682	RAMCAR BATTERIES INC	Commerce	2.43	0.04	0.17
800278	SFPP, L.P.	Carson	2.43	0.00	0.10
18508	AIR PROD & CHEM INC, PACIFIC ANCHOR CHEM	Los Angeles	2.40	0.10	0.81
800202	UNIVERSAL STUDIOS INC	Universal City	2.40	< 0.01	0.03
117319	EQUILON ENTERPRISES,LLC	Long Beach	2.39	0.00	0.01
133405	BODYCOTE INC./BODYCOTE THERMAL PROCESSING	Los Angeles	2.36	0.03	0.20
1208	MICROSEMI CORPORATION	Santa Ana	2.30	0.01	0.01
124838	EXIDE TECHNOLOGIES	Vernon	2.30	0.53	0.04
800056	GATX STORAGE TERMINALS CORP	San Pedro	2.30	0.00	0.03
103659	FOUR MEDIA CO.	Burbank	2.22	0.61	0.04
99773	CYTEC FIBERITE INC.	Anaheim	2.20	0.04	0.19
9668	DELUXE LABORATORIES INC, DELUXE LABORATOR	Hollywood	2.10	0.01	0.02
18931	TAMCO	Rancho Cucamonga	2.04	0.01	0.24
142267	FS PRECISION TECH LLC	Rancho Dominguez	2.03	0.08	0.15

Appendix A. Continued.

R00181   CALIFORNIA PORTLAND CEMENT CO   Colton   2.00   <0.01	Facility ID	Facility Name	City	Cancer Risk in a million	Acute Hazard Index	Chronic Hazard Index
Tidelands oil production co (l.B. oil co)	800181	CALIFORNIA PORTLAND CEMENT CO	Colton	2.00	< 0.01	0.39
TIDELANDS OIL PRODUCTION CO (L.B. Oil Co)	2605	3M CO	Northridge	1.98	0.40	0.38
Co    LA CITY SANITATION BUREAU, TERMINAL ISAND   LA CITY SANITATION BUREAU, TERMINAL INC   Los Angeles   L73   0.00	54627	HICKORY SPRINGS OF CAL INC	Commerce	1.95	0.01	0.48
ISLAND	800325	l ·	Long Beach	1.90	0.07	0.62
INC	10245	I *	San Pedro	1.83	0.02	0.03
Note	23559		Fullerton	1.80	0.01	0.08
NONEYWELL INTERNATIONAL INC   Los Angeles   1.77   0.00     1947   THUMS LONG BEACH CO, UNIT NO.01   Long Beach   1.70   <0.01     8309   CAMBRO MANUFACTURING CO   Huntington Beach   1.70   0.00     22467   LEFIELL MFG CO   Santa Fe Springs   1.70   0.75     82512   BREA CANYON OIL CO   Wilmington   1.70   0.01     17418   ALUMINUM COMPANY OF AMERICA   Vernon   1.60   0.30     119907   BERRY PETROLEUM   Santa Clarita   1.60   0.20     133660   HAYDEN INDUSTRIAL PRODUCTS   Corona   1.60   0.82     11192   HI-SHEAR CORP   Torrance   1.58   0.19     107350   N O-RING CORPORATION   Downey   1.53   0.00     126536   CONSOLIDATED FOUNDRIES, POMONA   Pomona   1.50   0.00     25070   LA CO., SANITATION DISTRICT   Whittier   1.40   <0.01     44577   LONG BEACH CITY, SERRF PROJECT   Long Beach   1.40   0.00     820408   TRW INC.   Manhattan Beach   1.37   0.92     3968   TABC INC.   Long Beach   1.35   0.05     62679   KOP-COAT INC   Vernon   1.33   0.00     123087   INDALEX WEST INC.   Industry   1.27   0.59     2526   CHEVRON USA INC   Van Nuys   1.25   <0.01     124806   EXIDE TECHNOLOGIES   Industry   1.27   0.59     246031   LA CO., SANITATION DIST, Spadra Landfill   Walnut   1.20   <0.01     124806   EXIDE TECHNOLOGIES   Industry   1.00   0.00     800127   THE GAS CO.   Montebello   0.996   0.03     47056   MYERS CONTAINER CORP   Huntington Park   0.90   0.23     800301   ITT GILFILLAN UNIT NO.01   Van Nuys   0.86   0.12	800037	DEMENNO/KERDOON	Compton	1.80	0.00	0.00
LACJUSC MEDICAL CENTER   Los Angeles   1.73   0.00	800189	DISNEYLAND RESORT	Anaheim	1.80	0.10	0.08
1947   THUMS LONG BEACH CO, UNIT NO.01   Long Beach   1.70   0.00	800003	HONEYWELL INTERNATIONAL INC	Torrance	1.77	0.00	0.01
1947   THUMS LONG BEACH CO, UNIT NO.01   Long Beach   1.70   0.00	20197	LAC/USC MEDICAL CENTER	Los Angeles	1.73	0.00	0.04
Sample   CAMBRO MANUFACTURING CO   Huntington Beach   1.70   0.00	1947	THUMS LONG BEACH CO, UNIT NO.01	_	1.70	< 0.01	0.14
22467   LEFIELL MFG CO	8309		_	1.70	0.00	0.15
17418	22467	LEFIELL MFG CO	_	1.70	0.75	0.17
17418	82512	BREA CANYON OIL CO	Wilmington	1.70	0.01	< 0.01
119907   BERRY PETROLEUM   Santa Clarita   1.60   0.20     133660   HAYDEN INDUSTRIAL PRODUCTS   Corona   1.60   0.82     11192   HI-SHEAR CORP   Torrance   1.58   0.19     107350   N O-RING CORPORATION   Downey   1.53   0.00     126536   CONSOLIDATED FOUNDRIES, POMONA   Pomona   1.50   0.00     25070   LA CO., SANITATION DISTRICT   Whittier   1.40   <0.01     44577   LONG BEACH CITY, SERRF PROJECT   Long Beach   1.40   0.00     82513   BREA CANYON OIL COMPANY INC   Harbor City   1.40   0.02     800408   TRW INC.   Manhattan Beach   1.37   0.92     3968   TABC INC.   Long Beach   1.35   0.05     62679   KOP-COAT INC   Vernon   1.33   0.00     123087   INDALEX WEST INC.   Industry   1.27   0.00     126544   PAC FOUNDRIES INDUSTRY   Industry   1.27   0.59     2526   CHEVRON USA INC   Van Nuys   1.25   <0.01     126544   PAC FOUNDRIES INDUSTRY   Industry   1.25   <0.01     22551   THUMS LONG BEACH CO, UNIT NO.04   Long Beach   1.20   0.00     42633   LA CO., SANITATION DIST, Spadra Landfill   Walnut   1.20   <0.01     106009   VENOCO INC   Beverly Hills   1.16   0.05     10340   BREA CANYON OIL COMPANY, INC.   Brea   1.14   <0.01     124806   EXIDE TECHNOLOGIES   Industry   1.00   0.00     800127   THE GAS CO.   Montebello   0.99   0.25     7730   E R CARPENTER CO INC   Riverside   0.96   0.03     47056   MYERS CONTAINER CORP   Huntington Park   0.90   0.23     800301   ITT GILFILLAN UNIT NO.01   Van Nuys   0.86   0.12	17418	ALUMINUM COMPANY OF AMERICA	_	1.60	0.30	0.30
11192   HI-SHEAR CORP   Torrance   1.58   0.19     107350   N O-RING CORPORATION   Downey   1.53   0.00     126536   CONSOLIDATED FOUNDRIES, POMONA   Pomona   1.50   0.00     25070   LA CO., SANITATION DISTRICT   Whittier   1.40   <0.01     44577   LONG BEACH CITY, SERRF PROJECT   Long Beach   1.40   0.00     82513   BREA CANYON OIL COMPANY INC   Harbor City   1.40   0.02     800408   TRW INC.   Manhattan Beach   1.37   0.92     3968   TABC INC.   Long Beach   1.35   0.05     62679   KOP-COAT INC   Vernon   1.33   0.00     123087   INDALEX WEST INC.   Industry   1.27   0.00     126544   PAC FOUNDRIES INDUSTRY   Industry   1.27   0.59     2526   CHEVRON USA INC   Van Nuys   1.25   <0.01     22551   THUMS LONG BEACH CO, UNIT NO.04   Long Beach   1.20   0.00     42633   LA CO., SANITATION DIST, Spadra Landfill   Walnut   1.20   <0.01     106009   VENOCO INC   Beverly Hills   1.16   0.05     10340   BREA CANYON OIL COMPANY, INC.   Brea   1.14   <0.01     124806   EXIDE TECHNOLOGIES   Industry   1.00   0.00     6670   TRU-CUT, INC.   Los Angeles   <1   0.00     800127   THE GAS CO.   Montebello   0.99   (0.23     7730   E R CARPENTER CO INC   Riverside   0.96   0.03     20375   PRUDENTIAL OVERALL SUPPLY   Riverside   0.96   0.03     47056   MYERS CONTAINER CORP   Huntington Park   0.90   0.23     800301   ITT GILFILLAN UNIT NO.01   Van Nuys   0.86   0.12	119907		Santa Clarita	1.60	0.20	0.73
107350   N O-RING CORPORATION   Downey   1.53   0.00     126536   CONSOLIDATED FOUNDRIES, POMONA   Pomona   1.50   0.00     25070   LA CO., SANITATION DISTRICT   Whittier   1.40   <0.01     44577   LONG BEACH CITY, SERRF PROJECT   Long Beach   1.40   0.00     82513   BREA CANYON OIL COMPANY INC   Harbor City   1.40   0.02     800408   TRW INC.   Manhattan Beach   1.37   0.92     3968   TABC INC.   Long Beach   1.35   0.05     62679   KOP-COAT INC   Vernon   1.33   0.00     123087   INDALEX WEST INC.   Industry   1.27   0.00     126544   PAC FOUNDRIES INDUSTRY   Industry   1.27   0.59     2526   CHEVRON USA INC   Van Nuys   1.25   <0.01     22551   THUMS LONG BEACH CO, UNIT NO.04   Long Beach   1.20   0.00     42633   LA CO., SANITATION DIST, Spadra Landfill   Walnut   1.20   <0.01     106009   VENOCO INC   Beverly Hills   1.16   0.05     10340   BREA CANYON OIL COMPANY, INC.   Brea   1.14   <0.01     124806   EXIDE TECHNOLOGIES   Industry   1.00   0.00     6670   TRU-CUT, INC.   Los Angeles   <1   0.00     800127   THE GAS CO.   Montebello   0.99 (c)   2.53 (c)     7730   E R CARPENTER CO INC   Riverside   0.96   0.03     20375   PRUDENTIAL OVERALL SUPPLY   Riverside   0.96   0.03     47056   MYERS CONTAINER CORP   Huntington Park   0.90   0.23     800301   ITT GILFILLAN UNIT NO.01   Van Nuys   0.86   0.12	133660	HAYDEN INDUSTRIAL PRODUCTS	Corona	1.60	0.82	0.44
126536   CONSOLIDATED FOUNDRIES, POMONA   Pomona   1.50   0.00     25070   LA CO., SANITATION DISTRICT   Whittier   1.40   <0.01     44577   LONG BEACH CITY, SERRF PROJECT   Long Beach   1.40   0.00     82513   BREA CANYON OIL COMPANY INC   Harbor City   1.40   0.02     800408   TRW INC.   Manhattan Beach   1.37   0.92     3968   TABC INC.   Long Beach   1.35   0.05     62679   KOP-COAT INC   Vernon   1.33   0.00     123087   INDALEX WEST INC.   Industry   1.27   0.00     126544   PAC FOUNDRIES INDUSTRY   Industry   1.27   0.59     2526   CHEVRON USA INC   Van Nuys   1.25   <0.01     22551   THUMS LONG BEACH CO, UNIT NO.04   Long Beach   1.20   0.00     42633   LA CO., SANITATION DIST, Spadra Landfill   Walnut   1.20   <0.01     106009   VENOCO INC   Beverly Hills   1.16   0.05     10340   BREA CANYON OIL COMPANY, INC.   Brea   1.14   <0.01     124806   EXIDE TECHNOLOGIES   Industry   1.00   0.00     6670   TRU-CUT, INC.   Los Angeles   <1   0.00     800127   THE GAS CO.   Montebello   0.996   0.03     800127   THE GAS CO.   Riverside   0.96   0.03     20375   PRUDENTIAL OVERALL SUPPLY   Riverside   0.96   0.03     47056   MYERS CONTAINER CORP   Huntington Park   0.90   0.23     800301   ITT GILFILLAN UNIT NO.01   Van Nuys   0.86   0.12	11192	HI-SHEAR CORP	Torrance	1.58	0.19	0.10
126536   CONSOLIDATED FOUNDRIES, POMONA   Pomona   1.50   0.00     25070   LA CO., SANITATION DISTRICT   Whittier   1.40   <0.01     44577   LONG BEACH CITY, SERRF PROJECT   Long Beach   1.40   0.00     82513   BREA CANYON OIL COMPANY INC   Harbor City   1.40   0.02     800408   TRW INC.   Manhattan Beach   1.37   0.92     3968   TABC INC.   Long Beach   1.35   0.05     62679   KOP-COAT INC   Vernon   1.33   0.00     123087   INDALEX WEST INC.   Industry   1.27   0.00     126544   PAC FOUNDRIES INDUSTRY   Industry   1.27   0.59     2526   CHEVRON USA INC   Van Nuys   1.25   <0.01     22551   THUMS LONG BEACH CO, UNIT NO.04   Long Beach   1.20   0.00     42633   LA CO., SANITATION DIST, Spadra Landfill   Walnut   1.20   <0.01     106009   VENOCO INC   Beverly Hills   1.16   0.05     10340   BREA CANYON OIL COMPANY, INC.   Brea   1.14   <0.01     124806   EXIDE TECHNOLOGIES   Industry   1.00   0.00     6670   TRU-CUT, INC.   Los Angeles   <1   0.00     800127   THE GAS CO.   Montebello   0.996   0.03     800127   THE GAS CO.   Riverside   0.96   0.03     20375   PRUDENTIAL OVERALL SUPPLY   Riverside   0.96   0.03     47056   MYERS CONTAINER CORP   Huntington Park   0.90   0.23     800301   ITT GILFILLAN UNIT NO.01   Van Nuys   0.86   0.12	107350	N O-RING CORPORATION	Downey	1.53	0.00	0.01
25070         LA CO., SANITATION DISTRICT         Whittier         1.40         <0.01			1	1.50		0.02
82513         BREA CANYON OIL COMPANY INC         Harbor City         1.40         0.02           800408         TRW INC.         Manhattan Beach         1.37         0.92           3968         TABC INC.         Long Beach         1.35         0.05           62679         KOP-COAT INC         Vernon         1.33         0.00           123087         INDALEX WEST INC.         Industry         1.27         0.00           126544         PAC FOUNDRIES INDUSTRY         Industry         1.27         0.59           2526         CHEVRON USA INC         Van Nuys         1.25         <0.01	25070	·	Whittier	1.40	< 0.01	< 0.01
82513         BREA CANYON OIL COMPANY INC         Harbor City         1.40         0.02           800408         TRW INC.         Manhattan Beach         1.37         0.92           3968         TABC INC.         Long Beach         1.35         0.05           62679         KOP-COAT INC         Vernon         1.33         0.00           123087         INDALEX WEST INC.         Industry         1.27         0.00           126544         PAC FOUNDRIES INDUSTRY         Industry         1.27         0.59           2526         CHEVRON USA INC         Van Nuys         1.25         <0.01	44577	LONG BEACH CITY, SERRF PROJECT	Long Beach	1.40	0.00	0.03
800408         TRW INC.         Manhattan Beach         1.37         0.92           3968         TABC INC.         Long Beach         1.35         0.05           62679         KOP-COAT INC         Vernon         1.33         0.00           123087         INDALEX WEST INC.         Industry         1.27         0.00           126544         PAC FOUNDRIES INDUSTRY         Industry         1.27         0.59           2526         CHEVRON USA INC         Van Nuys         1.25         <0.01		·	_	1.40		< 0.01
3968         TABC INC.         Long Beach         1.35         0.05           62679         KOP-COAT INC         Vernon         1.33         0.00           123087         INDALEX WEST INC.         Industry         1.27         0.00           126544         PAC FOUNDRIES INDUSTRY         Industry         1.27         0.59           2526         CHEVRON USA INC         Van Nuys         1.25         <0.01						0.10
62679         KOP-COAT INC         Vernon         1.33         0.00           123087         INDALEX WEST INC.         Industry         1.27         0.00           126544         PAC FOUNDRIES INDUSTRY         Industry         1.27         0.59           2526         CHEVRON USA INC         Van Nuys         1.25         <0.01				1.35		0.22
123087   INDALEX WEST INC.   Industry   1.27   0.00     126544   PAC FOUNDRIES INDUSTRY   Industry   1.27   0.59     2526   CHEVRON USA INC   Van Nuys   1.25   <0.01     22551   THUMS LONG BEACH CO, UNIT NO.04   Long Beach   1.20   0.00     42633   LA CO., SANITATION DIST, Spadra Landfill   Walnut   1.20   <0.01     106009   VENOCO INC   Beverly Hills   1.16   0.05     10340   BREA CANYON OIL COMPANY, INC.   Brea   1.14   <0.01     124806   EXIDE TECHNOLOGIES   Industry   1.00   0.00     6670   TRU-CUT, INC.   Los Angeles   <1   0.00     800127   THE GAS CO.   Montebello   0.99 (c)   2.53 (c)     7730   E R CARPENTER CO INC   Riverside   0.96   0.03     20375   PRUDENTIAL OVERALL SUPPLY   Riverside   0.96   0.03     47056   MYERS CONTAINER CORP   Huntington Park   0.90   0.23     800301   ITT GILFILLAN UNIT NO.01   Van Nuys   0.86   0.12	62679	KOP-COAT INC	_	1.33	0.00	0.49
126544   PAC FOUNDRIES INDUSTRY   Industry   1.27   0.59     2526   CHEVRON USA INC   Van Nuys   1.25   <0.01     22551   THUMS LONG BEACH CO, UNIT NO.04   Long Beach   1.20   0.00     42633   LA CO., SANITATION DIST, Spadra Landfill   Walnut   1.20   <0.01     106009   VENOCO INC   Beverly Hills   1.16   0.05     10340   BREA CANYON OIL COMPANY, INC.   Brea   1.14   <0.01     124806   EXIDE TECHNOLOGIES   Industry   1.00   0.00     6670   TRU-CUT, INC.   Los Angeles   <1   0.00     800127   THE GAS CO.   Montebello   0.99 (c)   2.53 (c)     7730   E R CARPENTER CO INC   Riverside   0.96   0.03     20375   PRUDENTIAL OVERALL SUPPLY   Riverside   0.96   0.03     47056   MYERS CONTAINER CORP   Huntington Park   0.90   0.23     800301   ITT GILFILLAN UNIT NO.01   Van Nuys   0.86   0.12			Industry			0.03
2526         CHEVRON USA INC         Van Nuys         1.25         <0.01			-			0.09
42633         LA CO., SANITATION DIST, Spadra Landfill         Walnut         1.20         <0.01			=			0.01
42633         LA CO., SANITATION DIST, Spadra Landfill         Walnut         1.20         <0.01	22551	THUMS LONG BEACH CO. UNIT NO.04	Long Beach	1.20	0.00	0.01
106009         VENOCO INC         Beverly Hills         1.16         0.05           10340         BREA CANYON OIL COMPANY, INC.         Brea         1.14         <0.01		·				< 0.01
10340         BREA CANYON OIL COMPANY, INC.         Brea         1.14         <0.01		=				0.00
124806         EXIDE TECHNOLOGIES         Industry         1.00         0.00           6670         TRU-CUT, INC.         Los Angeles         <1	10340		-			0.12
6670         TRU-CUT, INC.         Los Angeles         <1	124806		Industry			0.04
800127         THE GAS CO.         Montebello         0.99 <sup>(c)</sup> 2.53 <sup>(c)</sup> 7730         E R CARPENTER CO INC         Riverside         0.96         0.03           20375         PRUDENTIAL OVERALL SUPPLY         Riverside         0.96         0.03           47056         MYERS CONTAINER CORP         Huntington Park         0.90         0.23           800301         ITT GILFILLAN UNIT NO.01         Van Nuys         0.86         0.12			•			0.04
7730         E R CARPENTER CO INC         Riverside         0.96         0.03           20375         PRUDENTIAL OVERALL SUPPLY         Riverside         0.96         0.03           47056         MYERS CONTAINER CORP         Huntington Park         0.90         0.23           800301         ITT GILFILLAN UNIT NO.01         Van Nuys         0.86         0.12		·	_			0.22 <sup>(c)</sup>
20375         PRUDENTIAL OVERALL SUPPLY         Riverside         0.96         0.03           47056         MYERS CONTAINER CORP         Huntington Park         0.90         0.23           800301         ITT GILFILLAN UNIT NO.01         Van Nuys         0.86         0.12						1.34
47056         MYERS CONTAINER CORP         Huntington Park         0.90         0.23           800301         ITT GILFILLAN UNIT NO.01         Van Nuys         0.86         0.12						0.08
800301 ITT GILFILLAN UNIT NO.01 Van Nuys 0.86 0.12						2.00
			_			0.19
			į –			<0.01
18378 GRUBER SYSTEMS, INC. Valencia 0.83 0.14			_			0.10

Appendix A. Continued.

Facility ID	Facility Name	City	Cancer Risk in a million	Acute Hazard Index	Chronic Hazard Index
22556	THUMS LONG BEACH CO, UNIT NO.02	Long Beach	0.80	< 0.01	< 0.01
111415	VAN CAN CO, SUBSIDIARY OF VAN CAMP SEAFO	Fontana	0.80	< 0.01	0.08
120088	BREITBURN ENERGY CO.	Santa Fe Springs	0.79	0.01	0.04
127642	EDWARDS LIFESCIENCES LLC	Irvine	0.75	< 0.01	0.00
22373	CONTAINER CORPORATION OF AMERICA	Los Angeles	0.74	< 0.01	< 0.01
24060	TOMKINS INDUSTRIES INC-LASCO PRODS GROUP	Anaheim	0.72	< 0.01	0.02
800091	MOBIL OIL CORP	Anaheim	0.72	0.01	0.00
772	DEFT INC	Irvine	0.70	< 0.01	< 0.01
24756	CRANE CO, HYDRO-AIRE DIV	Burbank	0.63	0.04	0.05
115394	AES ALAMITOS, LLC	Long Beach	0.63	0.00	0.02
134931	ALCOA GLOBAL FASTENERS, INC.	Fullerton	0.61	1.90	0.02
24957	GLENDALE CITY	Glendale	0.59	0.00	0.02
15647	CUSTOM ENAMELERS INC	Fountain Valley	0.55	0.11	0.02
3093	LA CO., OLIVE VIEW/UCLA MEDICAL CENTER	Sylmar	0.53	0.00	0.02
21895	AC PRODUCTS, INC.	Placentia	0.53	0.00	0.00
6281	US GOVT,MARINE CORPS AIR STATION,EL TORO	El Toro	0.51	<0.01	<0.01
1634	STEELCASE INC, WESTERN DIV	Tustin	0.50	< 0.01	< 0.01
39388	THUMS LONG BEACH CO, UNIT NO.03	Long Beach	0.50	< 0.01	< 0.01
61160	GE ENGINE SERVICES	Ontario	0.50	0.70	0.01
133046	PRECISION SPECIALTY METALS, INC.	Los Angeles	0.45	0.38	0.15
43436	TIMCO	Fontana	0.43	0.00	0.43
18990	LIFE PAINT COMPANY	Santa Fe Springs	0.41	0.02	0.00
12660	GOLDSHIELD FIBERGLASS, INC, PLANT #58	Fontana	0.40	0.01	0.05
115536	AES REDONDO BEACH, LLC	Redondo Beach	0.40	0.01	0.04
122295	FALCON FOAM, A DIV OF ALTAS ROOFING	Los Angeles	0.40	0.00	0.00
115663	EL SEGUNDO POWER, LLC	El Segundo	0.34	0.00	0.01
25638	BURBANK CITY, PUB SERV DEPT	Burbank	0.33	0.33	0.01
124805	EXIDE TECHNOLOGIES	Commerce	0.33	0.00	0.04
112192	CONSOLIDATED DRUM RECONDITIONING CO. INC.	South Gate	0.31	0.00	0.00
800343	BOEING SATELLITE SYSTEMS, INC.	El Segundo	0.30	< 0.01	0.21
24520	LA CO, SANITATION DISTRICTS	Rolling Hills Estates	0.29	< 0.01	< 0.01
99119	INTERPLASTIC CORP	Hawthorne	0.28	0.05	0.32
122300	BASF CORPORATION	Colton	0.28	0.56	0.02
19989	PARKER HANNIFIN AEROSPACE CORP	Irvine	0.27	0.01	0.00
16264	INTL COATINGS CO INC	Cerritos	0.17	0.00	0.00
800074	LA CITY, DWP HAYNES GENERATING STATION	Long Beach	0.17	0.00	0.01
48300	PRECISION TUBE BENDING	Santa Fe Springs	0.15	0.00	0.00
800168	PASADENA CITY, DWP	Pasadena	0.15	0.70	0.00

Appendix A. Continued.

Facility ID	Facility Name	City	Cancer Risk in a million	Acute Hazard Index	Chronic Hazard Index
800193	LA CITY, DWP; VALLEY STM PLANT	Sun Valley	0.15	0.25	0.00
7416	PRAXAIR INC	Wilmington	0.11	0.04	0.03
42676	AES PLACERITA, INC.	Newhall	0.11	0.08	0.01
115389	SO CAL EDISON CO	Hunt. Beach	0.11	0.00	0.00
1992	PRUDENTIAL OVERALL SUPPLY	Van Nuys	0.10	0.00	0.00
16044	SPECIALTY ORGANICS INC	Irwindale	0.10	0.00	0.23
25012	AMADA MFG AMERICA, INC.	La Mirada	< 0.1	0.00	0.00
24812	FARMER BROS CO	Torrance	0.09	0.00	0.02
94872	METAL CONTAINER CORP.	Mira Loma	0.08	0.39	0.36
111110	BRISTOL FIBERLITE IND	Santa Ana	0.08	0.00	0.02
20144	CANON BUSINESS MACHINES INC	Costa Mesa	0.05	0.00	0.07
106325	HARBOR COGENERATION CO.	Wilmington	0.05	0.02	0.00
22229	PROCESSES BY MARTIN, INC.	Lynwood	0.04	0.00	0.00
45938	E.M.E. INC/ELECTRO MACHINE & ENGINEERING	Compton	0.04	0.00	< 0.01
114847	FOAMEX L.P.	Compton	0.04	0.00	0.96
117785	BALL METAL BEVERAGE CONTAINER CORP.	Torrance	0.04	0.21	0.91
800320	AMVAC CHEMICAL CORP.	Los Angeles	0.04	0.07	0.34
800075	LA CITY, DWP SCATTERGOOD GENERATING STN.	Playa del Rey	0.03	0.00	0.00
1220	KOCH FUELS INC, KOCH MATERIALS CO	Fontana	0.02	0.33	0.01
51620	WHEELABRATOR NORWALK ENERGY COMPANY	Norwalk	0.02	0.01	0.02
115586	SUNDANCE SPAS	Chino	0.02	0.05	0.43
55711	SUNLAW COGENERATION PARTNERS I	Vernon	0.01	0.01	0.00
800009	AMERON PROTECTIVE COATINGS DIV	Brea	0.01	0.24	0.24
809	GARNER GLASS CO	Claremont	0.00	0.00	0.00
1732	INTL ELECTRONIC RESEARCH CORP	Burbank	0.00	0.00	0.00
1746	UNITED ALLOYS INC	Los Angeles	0.00	0.00	0.00
3084	CARDINAL INDUSTRIAL FINISHES INC	South El Monte	0.00	0.00	0.00
3578	PRUDENTIAL OVERALL SUPPLY	Carson	0.00	0.00	0.00
6163	OHLINE	Gardena	0.00	0.26	0.72
6315	FLO-KEM, INC.	Rancho Dominguez	0.00	0.03	0.61
7010	PRUDENTIAL OVERALL SUPPLY	Irvine	0.00	0.00	0.00
8560	PRUDENTIAL OVERALL SUPPLY CO	Commerce	0.00	0.00	0.00
8935	TRAIL RITE INC	Santa Ana	0.00	0.00	0.30
10656	NEWPORT LAMINATES	Santa Ana	0.00	< 0.01	< 0.01
19953	RISTON KELLER INC	Irvine	0.00	< 0.01	0.01
21544	US GOVT, MARINE CORPS AIR STA @BLD	Tustin	0.00	0.00	0.00
22092	WESTERN TUBE & CONDUIT CORP	Long Beach	0.00	0.02	0.62
24647	J. B. I. INC	Compton	0.00	0.00	0.17
40806	ASSOCIATED PLASTICS INC	Riverside	0.00	0.73	0.20
51849	ELIMINATOR CUSTOM BOATS	Mira Loma	0.00	< 0.01	< 0.01
55714	SUNLAW COGENERATION PARTNERS I	Vernon	0.00	0.01	0.00

## Appendix A. Continued.

Facility ID	Facility Name	City	Cancer Risk in a million	Acute Hazard Index	Chronic Hazard Index
70021	XERXES CORP ( A DELAWARE CORP)	Anaheim	0.00	< 0.01	< 0.01
102075	FOAMEX	Orange	0.00	0.39	0.43
119127	PRC DE SOTO INTERNATIONAL	Glendale	0.00	< 0.01	< 0.01
124016	OAKITE PRODUCTS, INC.	La Mirada	0.00	0.14	0.08
141904	VERMAX, INC	Pomona	0.00	< 0.01	0.25
144677	ENT	Canoga Park	0.00	< 0.01	< 0.01
800018	BAXTER HEALTH CARE CORP, BENTLEY DIV	Irvine	0.00	<0.01	0.37

#### Notes:

- (a) Current risks as reviewed and approved by the AB 2588 staff. In most instances the risks are from an approved HRA. However, in some instances the risks are those after the implementation of a risk reduction plan. See Table 1 for the status of the facility's risk reduction plan. Any exceptions to this general rule are noted below.
- (b) Pending finalization of residual risk analysis.
- (c) Risk estimates in the draft HRA.

<u>Action Risk Levels:</u> Cancer risk  $\geq$  25 in a million; Acute HI  $\geq$  3.0; Chronic HI  $\geq$  3.0

<u>Public Notification Levels:</u> Cancer risk  $\geq 10$  in a million; Acute HI > 1.0; Chronic HI > 1.0

 $\underline{Exemption\ Levels:}\ Cancer\ risk < 1\ in\ a\ million;\ Acute\ HI < 0.1;\ Chronic\ HI < 0.1$ 

## Appendix B Toxic Rule Adoptions and Amendments for 2005

# Rule 1470 – Requirements for Stationary Diesel-fueled Internal Combustion and Other Compression Ignition Engines

Rule 1470 was amended to make it consistent with changes made to the Airborne Toxic Control Measure (ATCM) for Stationary Compression Ignition Engines after its adoption by CARB in February 2004. Amendments included the addition of effective dates for rule requirements, modifications of definitions, and the addition of clarifying language. Estimated Emission Reductions: None. [March 2005]

## Rule 1469.1 – Spraying Operations Using Coatings Containing Chromium

Rule 1469.1 was adopted to reduce chromium emissions from processes that spray primers or coatings containing hexavalent chromium, a carcinogen. Facilities have three compliance options: 1) an annual emission limit, 2) installation of HEPA filters or better, or 3) a facility-wide risk limit. Reductions of hexavalent chromium and potentially other toxic emissions would occur through adding new or upgrading existing control equipment. Estimated Emission Reductions: Unquantified reduction of toxic emissions. [March 2005]

# Rules 1401 – New Source Review of Toxic Air Contaminants and 1402 – Control of Toxic Air Contaminants from Existing Sources

Rule 1401 Table 1 was amended to add new or updated cancer or chronic risk values for naphthalene, speciated polychlorinated biphenyls (PCBs), 2 polychlorinated dibenzo-p-dioxins (PCDDs), and 1 polychlorinated dibenzofuran (PCDF). Other amendments clarified risk calculation procedures and updated definitions for consistency with new risk guidelines. Estimated Emission Reductions: None. [March 2005]

### Rule 3503 – Emissions Inventory and Health Risk Assessment for Railyards

Rule 3503 applies to railyards operated by Class I freight railyards and switching and terminal railroads in the South Coast Air Basin. Its adoption requires railroad operators to develop criteria pollutant and toxic emissions inventories and conduct health risk assessments (HRAs) to estimate the cancer and noncancer risks caused by emissions at railyards. It also requires railroad operators to notify the public regarding such health risks. Estimated Emission Reductions: None. [October 2005]

## Rule 1401.1 – Requirements for New and Relocated Facilities Near Schools

Rule 1401.1 was adopted to impose more stringent risk requirements for new or relocated facilities that emit toxic air contaminants and site within 500 feet of a school (1,000 feet in some cases) for the protection of children attending schools. Rule requirements

include facility-wide cancer and non-cancer risk thresholds for the affected facilities and additional information for public notices. Estimated Emission Reductions: None. [November 2005]